

REMARKS

Applicant respectfully requests reconsideration. Claims 1-26 and 75 were previously pending in the application. Applicant has added new claims 78-86. No claims have been amended. No new matter has been added. Accordingly, claims 1-26, 75 and 78-86, are pending for examination with claim 1 being independent.

Telephone Interview

Applicant wishes to thank the Examiner for the telephone interview conducted on Thursday, March 30, 2006. In the telephone interview, Applicant discussed independent claim 1 and, in particular, the recitation in claim 1 regarding the detuning parameter and why that recitation is not taught or suggested in any of the cited references including US Patent Publication No. 2003/0141507. Applicant is responding to the Office Action consistent with discussion in the interview.

Double Patenting Rejections

Claims 1-26 and 75 were provisionally rejected under the ground of non-statutory obviousness type double patenting as being unpatentable over claims 27, 29-44, 47-50 and 75 of co-pending Application Serial No. 10/951,117. Applicant is filing an appropriate Terminal Disclaimer to address this rejection without acceding to its correctness.

Claims 1-26 and 75 were provisionally rejected on the ground of non-statutory obviousness type double patenting as being unpatentable over claims 1, 7, 12-17, 19-21, 55, 58 and 59 of co-pending Application Serial No. 10/724,029. Applicant is filing an appropriate Terminal Disclaimer to address this rejection without acceding to its correctness.

Claims 1-26 and 75 were provisionally rejected on the ground of non-statutory obviousness type double patenting as being unpatentable over claim 1 of co-pending Application Serial No. 10/735,498. Applicant is filing an appropriate Terminal Disclaimer to address this rejection without acceding to its correctness.

Accordingly, Applicant respectfully requests withdrawal of the double patenting rejections.

Rejection of Claims 1-5, 10-13, 15-22, 24, 25 and 75

Claims 1-5, 10-13, 15-22, 24, 25 and 75 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,834,331 (Razeghi) in view of U.S. Patent No. 5,779,924 (Krames 1) and U.S. Patent Publication No. 2003/0141507 (Krames 2). The Office Action states that Krames 2 discloses a detuning parameter with a value greater than 0 and cites FIG. 3 and Paragraphs 41 and 47 as being relevant.

As discussed during the interview, Krames 2 teaches a periodic pattern, but fails to disclose a pattern having an ideal lattice constant and a *detuning parameter with a value greater than 0* as recited in claim 1. (Emphasis added). For example, Krames shows a periodic pattern in FIG. 3 and describes periodic patterns in the Abstract (e.g., line 2), Summary of the Invention (e.g., paragraph 15, line 5) and in the Detailed Description, (paragraph 38, lines 1-2). However, Krames fails to teach or suggest any pattern with a detuning parameter as claimed.

Razeghi and Krames 1 also fail to teach or suggest a pattern having an ideal lattice constant and a detuning parameter with a value greater than 0. Therefore, the combination of Razeghi in view of Krames 1 and further in view of Krames 2 fails to teach or suggest each limitation of claim 1. Moreover, Applicant does not believe that one of ordinary skill in the art would have been motivated to combine the teachings of Razeghi in view of Krames 1 and further in view of Krames 2 as noted in the Office Action.

Because each claim limitation is not taught or suggested by the combination and one of ordinary skill in the art would not have been motivated to combine the references, independent claim 1 is patentable in view of the combination of Razeghi in view of Krames 1 and further in view of Krames 2. The remaining claims that stand rejected on this ground depend from claim 1 and are patentable for at least this reason.

Accordingly, Applicant respectfully requests withdrawal of the rejections on this ground.

Rejection of Claims 6 and 7

Claims 6 and 7 were rejected under 35 U.S.C. §103(a) as being unpatentable over Razeghi in view of Krames 1, Krames 2 and U.S. Patent No. 6,803,603 (Nitta).

Claims 6 and 7 depend from independent claim 1 which is patentable over the combination of Razeghi in view of Krames 1 and Krames 2 for the reasons noted above. Nitta also fails to teach or suggest the limitation noted above that is not taught or suggested by the combination of Razeghi in view of Krames 1 and Krames 2. Therefore, for at least this reason, independent claim 1 and dependent claims 6 and 7 are patentable in view of the combination of Razeghi in view Krames 1, Krames 2 and Nitta.

Accordingly, Applicant respectfully requests withdrawal of the rejections on this ground.

Rejection of Claim 8

Claim 8 was rejected under 35 U.S.C. §103(a) as being unpatentable over Razeghi in view of Krames 1, Krames 2, Nitta and U.S. Patent No. 6,169,294 (Biing-Jye). Claim 8 depends from claim 1. Biing-Jye fails to provide the limitation of claim 1 noted above that is not taught or suggested by the combination of Razeghi in view of Krames 1, Krames 2 and Nitta. Therefore, claim 1 and claim 8 are patentable over the combination of Razeghi in view of Krames 1, Krames 2, Nitta and Biing-Jye for at least this reason.

Accordingly, Applicant respectfully requests withdrawal of the rejection on this ground.

Rejection of Claim 9

Claim 9 was rejected under 35 U.S.C. 103(a) as being unpatentable over Razeghi in view of Krames 1, Krames 2 and U.S. Patent No. 6,037,603 (Nelson). Claim 9 depends from claim 1. Nelson fails to provide the limitation of claim 1 noted above that is not taught or suggested by the combination of Razeghi in view of Krames 1 and Krames 2. Therefore, claim 1 and claim 9 are patentable over the combination of Razeghi in view of Krames 1, Krames 2 and Nelson for at least this reason.

Accordingly, Applicant respectfully requests withdrawal of the rejections on this ground.

Rejection of Claim 14

Claim 14 was rejected under 35 U.S.C. §103(a) as being unpatentable over Razeghi in view of Krames 1, Krames 2 and U.S. Patent No. 5,955,749 (Joannopoulos). Claim 14 depends from claim 1. Joannopoulos fails to provide the limitation of claim 1 noted above that is not taught or suggested by the combination of Razeghi in view of Krames 1 and Krames 2. Therefore, claim 1 and claim 14 are patentable over the combination of Razeghi in view of Krames 1, Krames 2 and Joannopoulos for at least this reason.

Accordingly, Applicant respectfully requests withdrawal of the rejections on this ground.

Rejection of Claim 23

Claim 23 was rejected under 35 U.S.C. §103(a) as being unpatentable over Razeghi in view of Krames 1, Krames 2 and U.S. Patent No. 6,091,085 (Lester). Claim 23 depends from claim 1. Lester fails to provide the limitation of claim 1 noted above that is not taught or suggested by the combination of Razeghi in view of Krames 1, Krames 2. Therefore, claim 1 and claim 23 are patentable over the combination of Razeghi in view of Krames 1, Krames 2, and Lester for at least this reason.

Accordingly, Applicant respectfully requests withdrawal of the rejections on this ground.

Rejection of Claim 26

Claim 26 was rejected under 35 U.S.C. §103(a) as being unpatentable over Razeghi i view of Krames 1, Krames 2 and U.S. Patent Publication No. 2003/0222263 (Choi). Claim 26 depends from claim 1. Choi fails to provide the limitation of claim 1 that is not taught or suggested by the combination of Razeghi in view of Krames 1, Krames 2 and Nitta noted above. Therefore, claim 1 claim 26 are patentable over the combination of Razeghi in view of Krames 1, Krames 2 and Choi for at least this reason.

Accordingly, Applicant respectfully requests withdrawal of the rejections on this ground.

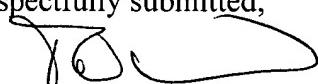
New Claims 78-86

New claims 78-86 depend from independent claim 1 which is patentable over the cited references for reasons noted above. Thus, for at least these reasons, new claims 78-86 are also patentable.

Notice of Allowance

The reasons for allowance in the notice of allowance mailed on May 23, 2005 states that, with regard to claim 1, Krames 1 fails to disclose the following: a) the surface of the first layer has a dielectric function that varies spatially according to a pattern. Applicant notes that Krames 1 does teach a surface having a dielectric function that varies spatially according to a pattern, however, Krames 1 fails to teach or suggest a pattern having an ideal lattice constant and a detuning parameter with a value greater than 0, as recited in claim 1.

Respectfully submitted,

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